

Six Flags New England	
SUBJECT: WIRE ROPES, HOOKS, SLINGS	SAFETY REFERENCE MANUAL
SECTION: 38	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS
CFR #: 29 CFR <b>1910.176</b> – <i>Subpart N</i> and <b>1926.250</b> – <i>Subpart H</i>	

### 38.1 PURPOSE

To establish a routine safety inspection process for all wire ropes, hooks/slings, hoists and other crane lifting devices as well as the proper storage of these items.

### 38.2 OBJECTIVE

To prevent injuries due to faulty wire ropes, hooks/slings, hoists used during crane operations.

### 38.3 SCOPE

To define exactly how to inspect and maintain these items on a regular basis

### 38.4 PROCEDURE

**Inspections:** Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use, where service conditions warrant.

A monthly preventative maintenance procedure will exist in the Maintenance Department that will accomplish the following:

- A. A wire rope or sling that exhibits any of the following conditions shall be immediately removed from service.
  - 1. Three (3) or more broken wires in a strand in one (1) rope lay.
  - 2. Wear or scraping of 1/3 the original diameter of outside individual wires.
  - 3. Kinking, crushing, bird caging, or any other damage resulting in distortion of the wire rope structure.
  - 4. Corrosion or evidence of heat damage in any part.
  - 5. Sleeves that is cracked, deformed, or worn-out.
  - 6. Missing or incorrect Manufacturer's Tag.
- B. If the sling is dirty or showing signs of rust, clean and apply a protective coating.

Six Flags New England	
SUBJECT: WIRE ROPES, HOOKS, SLINGS	SAFETY REFERENCE MANUAL
SECTION: 38	
EFFECTIVE: January 2016	SUPERSEDES: ALL PREVIOUS
CFR #: 29 CFR <b>1910.176</b> – <i>Subpart N</i> and <b>1926.250</b> – <i>Subpart H</i>	

- C. Record condition of (and/or reason for discard) wire rope, hook or sling in the monthly inspection log.
- D. Job or shop hooks and links or makeshift fasteners formed from bolts, rods, or other such attachments shall not be used.
- E. When U-bolts are used for eye splices, the U-bolt shall be applied so that the "U" section is in contact with the dead end of the rope.
- F. Once hooks get to the point where they do not open and close as specified by the manufacturer, they shall be discarded. Be sure and note this on the monthly inspection log.

### **38.5 STORAGE**

Proper storage of hooks, wires and slings is essential to prolonging the life and effectiveness of the equipment. Improper storage of equipment may cause uneven or premature wear, or other damage that could lead to equipment failure.

- 1. Storage area must be free of chemicals: Chemicals such as solvents and acids may cause a rapid decay of equipment if exposure occurs.
- 2. Equipment organization: Instead of throwing them in a pile, storing items neatly will help prevent abuse and premature wear.
- 3. Shielding from direct sunlight: Especially important for synthetic slings since this material can become dry and weakened (cracked) from direct sunlight exposure.
- 4. Inventory: A designated person should periodically inspect the storage area to ensure that all items are accounted for and that they are being stored in the proper manner.